BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

Measurements Taken On :

ABSTRACT OF MEASUREMENT SHEET - 1st and FINAL BILL

Item No	Description	Unit	Quantity	Approved Tender Rates	Amount	Remarks
Item No. 1	Removing and refixing stone slabs of drains and pointing in CM (1:3) and as per the directions of the Engineer-in-charge of the work .	Sqm	67.50			
	present Qty	Sqm	67.50			
	Previous Bill Qty	Sqm	-			
	Total	Sqm	67.50			
	Tender Qty	Sqm	67.50			
	Now to be paid	Sqm	67.50	111.30	7512.75	
Item No. 2	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum	1177.88			
	present Qty	Cum	1177.88			
	Previous Bill Qty	Cum	-			
	Total	Cum	1177.88			
	Tender Qty	Cum	1178.77			
	Now to be paid	Cum	1177.88	215.28	253573.47	
Item No. 03	Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum	249.95			
	present Qty	Cum	249.95			
	Previous Bill Qty	Cum	-			
	Total	Cum	249.95			
	Tender Qty	Cum	246.11			
	Now to be paid	Cum	249.95			
	Quantity Limited To	Cum	246.11	5421.90	1334383.81	
Item No. 04	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification and as per the directions of the Engineer-in-charge of the work .	Cum	315.34			
	present Qty	Cum	315.34			
	Previous Bill Qty	Cum	-			

CIVIL PWD Sub Date BANGALORE

Contractor

PMC

Assistant Engineer

Assistant Executive Engineer

	Description	Unit	Quantity	Approved Tender Rates	Amount	Remarks
	Total	Cum	315.34			
	Tender Qty	Cum	315.30			
	Now to be paid	Cum	315.34			
	Quantity Limited To	Cum	315.30	7070.20	2229234.06	
Item No.05	Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.	Tonne	22.97			
	present Qty	Tonne	22.97			
	Previous Bill Qty	Tonne	-			
	Total	Tonne	22.97			
	Tender Qty	Tonne	22.95			
	Now to be paid	Tonne	22.97	73992.24	1699250.29	
Item No.06	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	704.16			
	present Qty	Sqm	704.16			
	Previous Bill Qty	Sqm	-			
	Total	Sqm	704.16			
	Tender Qty	Sqm	702.75			
	Now to be paid	Sqm	704.16			
	Quantity Limited To	Sqm	702.75	2337.00	1642326.75	
Item No.07	Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	70.26			
	present Qty	Sqm	70.26			
	Previous Bill Qty	Sqm	-			
	Total	Sqm	70.26			
	Tender Qty	Sqm	70.56			
	Now to be paid	Sqm	70.26	5418.00	380668.68	
Item No.08	Providing and filling sand in foundation to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.and as per the directions of Engineer in-charge.	Cum	78.00			
	present Qty	Cum	78.00			
	Previous Bill Qty	Cum	-			
	Total	Cum	78.00			

CIVIL Pro Sq. Date. RMC BANGALORE

Contractor

AssistantEngineer

Assistant Executive Engineer

		Unit	Quantity	Approved Tender Rates	Amount	Remarks
	Tender Qty					
	Now to be paid	**Cum**	**78.00**			
Item No.09	Providing and filling sand in foundation to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.and as per the directions of Engineer in-charge.	**Cum**	**78.00**	**263.94**	**20587.32**	
	present Qty	**Cum**	**23.40**			
	Previous Bill Qty	**Cum**	**-**			
	Total	**Cum**	**23.40**			
	Tender Qty	**Cum**	**23.40**			
	Now to be paid	**Cum**	**23.40**	**2183.60**	**51096.24**	
Item No.10	Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 63mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. and as per the directions of Engineer in-char	**Rmtr**	**260.00**			
	present Qty	**Rmtr**	**260.00**			
	Previous Bill Qty	**Rmtr**	**-**			
	Total	**Rmtr**	**260.00**			
	Tender Qty	**Rmtr**	**260.00**			
	Now to be paid	**Rmtr**	**260.00**	**394.32**	**102523.20**	
Item No.11	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. and as per the directions of Engineer in-charge.	**Cum**	**54.60**			
	present Qty	**Cum**	**54.60**			
	Previous Bill Qty	**Cum**	**-**			
	Total	**Cum**	**54.60**			
	Tender Qty	**Cum**	**54.60**			
	Now to be paid	**Cum**	**54.60**	**128.26**	**7003.00**	
Item No.12	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. and as per the directions of Engineer in-charge.	**Cum**	**144.94**			
	present Qty	**Cum**	**144.94**			
	Previous Bill Qty	**Cum**	**-**			
	Total	**Cum**	**144.94**			
	Tender Qty	**Cum**	**122.00**			
	Now to be paid	**Cum**	**144.94**			
	Quantity Limited To	**Cum**	**122.00**	**973.42**	**118757.24**	

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BANGALORE

Contractor

AssistantEngineer

Assistant Executive Engineer

Item No	Description	Unit	Quantity	Approved Tender Rates	Amount	Remarks
Item No.13	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. and as per the directions of Engineer in-charge.	Cum	108.70			
	present Qty	Cum	108.70			
	Previous Bill Qty	Cum	-			
	Total	Cum	108.70			
	Tender Qty	Cum	91.50			
	Now to be paid	Cum	108.70			
	Quantity Limited To	Cum	91.50	5210.96	476802.84	
Item No.14	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diise etc. with all lead and lift. and as per the directions of Engineer in-charge.	Sqm	724.69			
	present Qty	Sqm	724.69			
	Previous Bill Qty	Sqm	-			
	Total	Sqm	724.69			
	Tender Qty	Sqm	610.00			
	Now to be paid	Sqm	724.69			
	Quantity Limited To	Sqm	610.00	72.08	43968.80	
				SUB TOTAL AMOUNT	8367688.44	
				Add KRIDL @ 4%	334707.54	
				Add GST @ 12%	1004122.61	
				TOTAL AMOUNT	9706518.59	

CIVIL Pro

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item no. 01		Removing and refixing stone slabs of drains and pointing in CM (1:3) and as per the directions of the Engineer-in-charge of the work .							
Measurements Taken On :									
		KEB layout (from Vijayamma house)							
4	11		Sqm	1	7.00	0.90		6.30	
23	28		Sqm	1	5.00	0.90		4.50	
36	42		Sqm	1	6.00	0.90		5.40	
52	58		Sqm	1	6.00	0.90		5.40	
66	72		Sqm	1	6.00	0.90		5.40	
78	88		Sqm	1	10.00	0.90		9.00	
95	103		Sqm	1	8.00	0.90		7.20	
109	119		Sqm	1	10.00	0.90		9.00	
122	132		Sqm	1	10.00	0.90		9.00	
139	146		Sqm	1	7.00	0.90		6.30	
							Total	67.50	

Contactor

CIVIL Pro Sig. Date BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item No. 02		Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. and as per the directions of the Engineer-in-charge of the work .							
Measurements Taken On :									
		CC Drain							
		3rd A cross							
		LHS (towards main road)							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	32.4		Cum	1	2.40	1.10	1.10	2.90	
39.4	54.4		Cum	1	15.00	1.10	1.10	18.15	
54.4	58.8		Cum	1	4.40	1.10	1.10	5.32	
		RHS (from main road)							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	
45	56		Cum	1	11.00	1.10	1.10	13.31	
		4th A Cross							
		RHS towards main road							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	
45	60		Cum	1	15.00	1.10	1.10	18.15	
60	72.6		Cum	1	12.60	1.10	1.10	15.25	
		LHS from Main							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	
45	60		Cum	1	15.00	1.10	1.10	18.15	
60	75.1		Cum	1	15.10	1.10	1.10	18.27	
		6th A Cross							

Contactor

CIVIL Pro PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	46.3		Cum	1	16.30	1.10	1.10	19.72	
		Umamaheshwari temple left (In main road)							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	32.1		Cum	1	17.10	1.10	1.10	20.69	
		(Front of Umamaheshwari temple)							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	41.4		Cum	1	11.40	1.10	1.10	13.79	
		KEB layout (from Vijayamma house)							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	
45	60		Cum	1	15.00	1.10	1.10	18.15	
60	75		Cum	1	15.00	1.10	1.10	18.15	
75	91.2		Cum	1	16.20	1.10	1.10	19.60	
98.65	106.3	91.2 to 98.65 No drain	Cum	1	7.60	1.10	1.10	9.20	
106.25	121.3		Cum	1	15.00	1.10	1.10	18.15	
121.25	136.3		Cum	1	15.00	1.10	1.10	18.15	
136.3	151.3		Cum	1	15.00	1.10	1.10	18.15	
151.3	166.3		Cum	1	15.00	1.10	1.10	18.15	
166.3	181.3		Cum	1	15.00	1.10	1.10	18.15	
181.3	196.3		Cum	1	15.00	1.10	1.10	18.15	
196.3	211.3		Cum	1	15.00	1.10	1.10	18.15	
211.3	222.3		Cum	1	11.00	1.10	1.10	13.31	
222.3	223.6		Cum	1	1.30	1.10	1.10	1.57	
223.6	234.2		Cum	1	10.60	1.10	1.10	12.83	
		KEB layout							
		Cross Road							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	

Contactor

CIVIL Pro Sig Date BMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
45	60		Cum	1	15.00	1.10	1.10	18.15	
60	75		Cum	1	15.00	1.10	1.10	18.15	
75	90		Cum	1	15.00	1.10	1.10	18.15	
90	100		Cum	1	10.00	1.10	1.10	12.10	
		Suryavamshi							
		Main Road							
0	15		Cum	1	15.00	1.10	1.10	18.15	
15	30		Cum	1	15.00	1.10	1.10	18.15	
30	45		Cum	1	15.00	1.10	1.10	18.15	
45	60		Cum	1	15.00	1.10	1.10	18.15	
60	75		Cum	1	15.00	1.10	1.10	18.15	
75	90		Cum	1	15.00	1.10	1.10	18.15	
90	105		Cum	1	15.00	1.10	1.10	18.15	
105	115		Cum	1	10.00	1.10	1.10	12.10	
		For Culvert							
		6th A cross	Cum	1	3.45	1.50	1.10	5.69	
		KEB layout	Cum	1	8.70	1.50	1.10	14.36	
			Cum	1	7.50	1.50	1.10	12.38	
			Cum	1	5.30	1.50	1.10	8.75	
		4thA Cross	Cum	1	6.00	1.50	1.10	9.90	
		5thA Cross	Cum	1	6.00	1.50	1.10	9.90	
		6thA Cross	Cum	1	6.00	1.50	1.10	9.90	
		For Desilt							
		Cross Road							
0	15		Cum	1	15.00	0.60	0.50	4.50	
15	30		Cum	1	15.00	0.60	0.50	4.50	
30	45		Cum	1	15.00	0.60	0.50	4.50	
45	60		Cum	1	15.00	0.60	0.50	4.50	
60	75		Cum	1	15.00	0.60	0.50	4.50	
75	90		Cum	1	15.00	0.60	0.50	4.50	
90	105		Cum	1	15.00	0.60	0.50	4.50	
105	120		Cum	1	15.00	0.60	0.50	4.50	
120	135		Cum	1	15.00	0.60	0.50	4.50	
135	150		Cum	1	15.00	0.60	0.50	4.50	
		Over Burden	Cum	2	51.00	1.20	0.60	73.44	
							TOTAL	1177.88	

Contactor

CIVIL Pro Sig PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item no.03		Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. and as per the directions of the Engineer-in-charge of the work .							
Measurements Taken On :									
		CC Drain							
		3rd A cross							
		LHS (towards main road)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	32.4		Cum	1	2.40	1.10	0.15	0.40	
39.4	54.4	32.4 To 39.4 No Drain	Cum	1	15.00	1.10	0.15	2.48	
54.4	58.8		Cum	1	4.40	1.10	0.15	0.73	
		RHS (from main road)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	
45	56		Cum	1	11.00	1.10	0.15	1.82	
		4th A Cross							
		RHS towards main road							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	
45	60		Cum	1	15.00	1.10	0.15	2.48	
60	72.6		Cum	1	12.60	1.10	0.15	2.08	
		LHS from Main							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	

Contactor

CIVIL Pro Sig PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET
FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
45	60		Cum	1	15.00	1.10	0.15	2.48	
60	75.1		Cum	1	15.10	1.10	0.15	2.49	
		6th A Cross							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	46.3		Cum	1	16.30	1.10	0.15	2.69	
		Umamaheshwari temple left (In main road)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	32.1		Cum	1	17.10	1.10	0.15	2.82	
		(Front of Umamaheshwari temple)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	41.4		Cum	1	11.40	1.10	0.15	1.88	
		KEB layout (from Vijayamma house)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	
45	60		Cum	1	15.00	1.10	0.15	2.48	
60	75		Cum	1	15.00	1.10	0.15	2.48	
75	91.2		Cum	1	16.20	1.10	0.15	2.67	
98.65	106.3	91.2 to 98.65 No Drain	Cum	1	7.60	1.10	0.15	1.25	
106.25	121.3		Cum	1	15.00	1.10	0.15	2.48	
121.25	136.3		Cum	1	15.00	1.10	0.15	2.48	
136.3	151.3		Cum	1	15.00	1.10	0.15	2.48	
151.3	166.3		Cum	1	15.00	1.10	0.15	2.48	
166.3	181.3		Cum	1	15.00	1.10	0.15	2.48	
181.3	196.3		Cum	1	15.00	1.10	0.15	2.48	
196.3	211.3		Cum	1	15.00	1.10	0.15	2.48	
211.3	222.3		Cum	1	11.00	1.10	0.15	1.82	
222.3	223.6		Cum	1	1.30	1.10	0.15	0.21	
223.6	234.2		Cum	1	10.60	1.10	0.15	1.75	
		KEB layout							
		Cross Road							

Contactor

PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
0	15		Cum	1	15.00	1.00	0.15	2.25	
15	30		Cum	1	15.00	1.00	0.15	2.25	
30	45		Cum	1	15.00	1.00	0.15	2.25	
45	60		Cum	1	15.00	1.00	0.15	2.25	
60	75		Cum	1	15.00	1.00	0.15	2.25	
75	90		Cum	1	15.00	1.00	0.15	2.25	
90	100		Cum	1	10.00	1.00	0.15	1.50	
		Suryavamshi							
		Main Road							
0	15		Cum	1	15.00	1.00	0.15	2.25	
15	30		Cum	1	15.00	1.00	0.15	2.25	
30	45		Cum	1	15.00	1.00	0.15	2.25	
45	60		Cum	1	15.00	1.00	0.15	2.25	
60	75		Cum	1	15.00	1.00	0.15	2.25	
75	90		Cum	1	15.00	1.00	0.15	2.25	
90	105		Cum	1	15.00	1.00	0.15	2.25	
105	115		Cum	1	10.00	1.00	0.15	1.50	
		For Culvert							
		6th A cross	Cum	1	3.45	1.50	0.15	0.78	
		KEB layout	Cum	1	8.70	1.50	0.15	1.96	
			Cum	1	7.50	1.50	0.15	1.69	
			Cum	1	5.30	1.50	0.15	1.19	
		4thA Cross	Cum	1	6.00	1.50	0.15	1.35	
		5thA Cross	Cum	1	6.00	1.50	0.15	1.35	
		6thA Cross	Cum	1	6.00	1.50	0.15	1.35	
		For CC Road							
		3rd A cross							
0	2.3		Cum	1	2.30	3.50	0.15	1.21	
2.3	17.3		Cum	1	15.00	3.65	0.15	8.21	
17.3	32.3		Cum	1	15.00	3.90	0.15	8.78	
32.3	47.3		Cum	1	15.00	4.20	0.15	9.45	
47.3	58.8		Cum	1	11.50	4.65	0.15	8.02	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	5.15	0.15	11.59	
15	30		Cum	1	15.00	5.15	0.15	11.59	
30	45		Cum	1	15.00	5.50	0.15	12.38	
45	60		Cum	1	15.00	5.65	0.15	12.71	

Contactor

CIVIL Pro BPMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
60	75		Cum	1	15.00	5.05	0.15	11.36	
75	86.1		Cum	1	11.10	4.70	0.15	7.83	
87.6	95.2		Cum	1	7.60	4.90	0.15	5.59	
							TOTAL	249.95	

Contactor

CIVIL Pro Sig. Date PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Harohalli main and cross roads and surrounding areas in Ward No. 02 of Yelahanka Sub Division

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item no.05		**Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. and as per the directions of Engineer in-charge.**							
Measurements Taken On :									
		for Drain 70 kg	Tonne	From calculation sheet				20.27	
		for Culvert 100kg	Tonne	From calculation sheet				2.69	
							TOTAL	**22.97**	

Contactor

CIVIL Pro Sig PMC BANGALORE

Assistant Engineer

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no.06		Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per the directions of Engineer in-charge.							
		3rd A cross							
		LHS (towards main road)							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	32.4		Sqm	1	2.40	0.90		2.16	
39.4	54.4	32.4 To 39.4 No Drain	Sqm	1	15.00	0.90		13.50	
54.4	58.8		Sqm	1	4.40	0.90		3.96	
		RHS (from main road)							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	45		Sqm	1	15.00	0.90		13.50	
45	56		Sqm	1	11.00	0.90		9.90	
		4th A Cross							
		RHS towards main road							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	45		Sqm	1	15.00	0.90		13.50	
45	60		Sqm	1	15.00	0.90		13.50	
60	72.6		Sqm	1	12.60	0.90		11.34	
		LHS from Main							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	45		Sqm	1	15.00	0.90		13.50	
45	60		Sqm	1	15.00	0.90		13.50	
60	75.1		Sqm	1	15.10	0.90		13.59	
		6th A Cross							
0	15		Sqm	1	15.00	0.60		9.00	
15	30		Sqm	1	15.00	0.60		9.00	
30	46.3		Sqm	1	16.30	0.60		9.78	
		Umamaheshwari temple left (In main road)							
0	15		Sqm	1	15.00	0.90		13.50	
15	32.1		Sqm	1	17.10	0.90		15.39	

22/01/2020

CIVIL Pro Sig Date RMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
		(Front of Umamaheshwari temple)							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	41.4		Sqm	1	11.40	0.90		10.26	
		KEB layout (from Vijayamma house)							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	45		Sqm	1	15.00	0.90		13.50	
45	60		Sqm	1	15.00	0.90		13.50	
60	75		Sqm	1	15.00	0.90		13.50	
75	91.2		Sqm	1	16.20	0.90		14.58	
98.65	106.3	91.2 to 98.65 No Drain	Sqm	1	7.60	0.90		6.84	
106.25	121.3		Sqm	1	15.00	0.90		13.50	
121.25	136.3		Sqm	1	15.00	0.90		13.50	
136.3	151.3		Sqm	1	15.00	0.90		13.50	
151.3	166.3		Sqm	1	15.00	0.90		13.50	
166.3	181.3		Sqm	1	15.00	0.90		13.50	
181.3	196.3		Sqm	1	15.00	0.90		13.50	
196.3	211.3		Sqm	1	15.00	0.90		13.50	
211.3	222.3		Sqm	1	11.00	0.90		9.90	
222.3	223.6		Sqm	1	1.30	0.90		1.17	
223.6	234.2		Sqm	1	10.60	0.90		9.54	
		KEB layout							
		Cross Road							
0	15		Sqm	1	15.00	0.90		13.50	
15	30		Sqm	1	15.00	0.90		13.50	
30	45		Sqm	1	15.00	0.90		13.50	
45	60		Sqm	1	15.00	0.90		13.50	
60	75		Sqm	1	15.00	0.90		13.50	
75	90		Sqm	1	15.00	0.90		13.50	
90	100		Sqm	1	10.00	0.90		9.00	
		Suryavamshi							
		Main Road							
0	15		Sqm	1	15.00	0.75		11.25	
15	30		Sqm	1	15.00	0.75		11.25	
30	45		Sqm	1	15.00	0.75		11.25	
45	60		Sqm	1	15.00	0.75		11.25	
60	75		Sqm	1	15.00	0.75		11.25	
75	90		Sqm	1	15.00	0.75		11.25	
90	105		Sqm	1	15.00	0.75		11.25	
105	115		Sqm	1	10.00	0.75		7.50	
							TOTAL	704.16	
							Quantity Limited to	702.75	

22/01/2020

CIVIL Pro Sig Date PMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no.07		**Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete aand as per the directions of Engineer in-charge.**							
		For Culvert							
		6th A cross	Sqm	1	3.45	1.20		4.14	
		KEB layout	Sqm	1	8.70	1.20		10.44	
			Sqm	1	7.50	1.20		9.00	
			Sqm	1	5.30	1.20		6.36	
		4thA Cross	Sqm	1	6.00	1.20		7.20	
		5thA Cross	Sqm	1	6.00	1.20		7.20	
		6thA Cross	Sqm	1	6.00	1.20		7.20	
		Missing Cover Slab Harohalli Surrounding Area	Sqm	10	1.80	0.60		10.80	
			Sqm	11	1.20	0.60		7.92	
							Total	70.26	

CIVIL Pro Sig Date PMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 08		**Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in ordinary soil, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications.and as per the directions of Engineer in-charge.**							
		3rd A cross							
0	2.3		Cum	1	2.30	0.50	0.60	0.69	
2.3	17.3		Cum	1	15.00	0.50	0.60	4.50	
17.3	32.3		Cum	1	15.00	0.50	0.60	4.50	
32.3	47.3		Cum	1	15.00	0.50	0.60	4.50	
47.3	58.8		Cum	1	11.50	0.50	0.60	3.45	
		4th A Cross							
		Towards main road							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	30		Cum	1	15.00	0.50	0.60	4.50	
30	45		Cum	1	15.00	0.50	0.60	4.50	
45	60		Cum	1	15.00	0.50	0.60	4.50	
60	74		Cum	1	14.00	0.50	0.60	4.20	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	30		Cum	1	15.00	0.50	0.60	4.50	
30	45		Cum	1	15.00	0.50	0.60	4.50	
45	60		Cum	1	15.00	0.50	0.60	4.50	
60	75		Cum	1	15.00	0.50	0.60	4.50	
75	86.1		Cum	1	11.10	0.50	0.60	3.33	
87.6	95.2		Cum	1	7.60	0.50	0.60	2.28	
		KEB layout (from Vijayamma house)							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	33.5		Cum	1	18.50	0.50	0.60	5.55	
							Total	78.00	

CIVIL Pro Sig Date BMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 09		Providing and filling sand in foundation to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.and as per the directions of Engineer in-charge.							
		3rd A cross							
0	2.3		Cum	1	2.30	0.45	0.20	0.21	
2.3	17.3		Cum	1	15.00	0.45	0.20	1.35	
17.3	32.3		Cum	1	15.00	0.45	0.20	1.35	
32.3	47.3		Cum	1	15.00	0.45	0.20	1.35	
47.3	58.8		Cum	1	11.50	0.45	0.20	1.04	
		4th A Cross							
		Towards main road							
0	15		Cum	1	15.00	0.45	0.20	1.35	
15	30		Cum	1	15.00	0.45	0.20	1.35	
30	45		Cum	1	15.00	0.45	0.20	1.35	
45	60		Cum	1	15.00	0.45	0.20	1.35	
60	74		Cum	1	14.00	0.45	0.20	1.26	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	0.45	0.20	1.35	
15	30		Cum	1	15.00	0.45	0.20	1.35	
30	45		Cum	1	15.00	0.45	0.20	1.35	
45	60		Cum	1	15.00	0.45	0.20	1.35	
60	75		Cum	1	15.00	0.45	0.20	1.35	
75	86.1		Cum	1	11.10	0.45	0.20	1.00	
87.6	95.2		Cum	1	7.60	0.45	0.20	0.68	
		KEB layout (from Vijayamma house)							
0	15		Cum	1	15.00	0.45	0.20	1.35	
15	33.5		Cum	1	18.50	0.45	0.20	1.67	
							Total	23.40	

Contactor

CIVIL Pro Sig Date PMC BANGALORE

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 10		**Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 63mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. and as per the directions of Engineer in-charge.**							
		3rd A cross							
0	2.3		Rmtr	1	2.30			2.30	
2.3	17.3		Rmtr	1	15.00			15.00	
17.3	32.3		Rmtr	1	15.00			15.00	
32.3	47.3		Rmtr	1	15.00			15.00	
47.3	58.8		Rmtr	1	11.50			11.50	
		4th A Cross							
		Towards main road							
0	15		Rmtr	1	15.00			15.00	
15	30		Rmtr	1	15.00			15.00	
30	45		Rmtr	1	15.00			15.00	
45	60		Rmtr	1	15.00			15.00	
60	74		Rmtr	1	14.00			14.00	
		5th A Cross							
		From main road							
0	15		Rmtr	1	15.00			15.00	
15	30		Rmtr	1	15.00			15.00	
30	45		Rmtr	1	15.00			15.00	
45	60		Rmtr	1	15.00			15.00	
60	75		Rmtr	1	15.00			15.00	
75	86.1		Rmtr	1	11.10			11.10	
87.6	95.2		Rmtr	1	7.60			7.60	
		KEB layout (from Vijayamma house)							
0	15		Rmtr	1	15.00			15.00	
15	33.5		Rmtr	1	18.50			18.50	
							Total	260.00	

CIVIL Pro Sig. Date BMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 11		Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. and as per the directions of Engineer in-charge.							
		3rd A cross							
0	2.3		Cum	1	2.30	0.50	0.60	0.69	
2.3	17.3		Cum	1	15.00	0.50	0.60	4.50	
17.3	32.3		Cum	1	15.00	0.50	0.60	4.50	
32.3	47.3		Cum	1	15.00	0.50	0.60	4.50	
47.3	58.8		Cum	1	11.50	0.50	0.60	3.45	
		4th A Cross							
		Towards main road							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	30		Cum	1	15.00	0.50	0.60	4.50	
30	45		Cum	1	15.00	0.50	0.60	4.50	
45	60		Cum	1	15.00	0.50	0.60	4.50	
60	74		Cum	1	14.00	0.50	0.60	4.20	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	30		Cum	1	15.00	0.50	0.60	4.50	
30	45		Cum	1	15.00	0.50	0.60	4.50	
45	60		Cum	1	15.00	0.50	0.60	4.50	
60	75		Cum	1	15.00	0.50	0.60	4.50	
75	86.1		Cum	1	11.10	0.50	0.60	3.33	
87.6	95.2		Cum	1	7.60	0.50	0.60	2.28	
		KEB layout (from Vijayamma house)							
0	15		Cum	1	15.00	0.50	0.60	4.50	
15	33.5		Cum	1	18.50	0.50	0.60	5.55	
		Quantity Deduct From Iteam No-09						-23.40	
							Total	54.60	

Contactor

CIVIL Pro Sig Date PMC BANGALORE

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 12		Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. and as per the directions of Engineer in-charge.							
		3rd A cross							
0	2.3		Cum	1	2.30	3.50	0.20	1.61	
2.3	17.3		Cum	1	15.00	3.65	0.20	10.95	
17.3	32.3		Cum	1	15.00	3.90	0.20	11.70	
32.3	47.3		Cum	1	15.00	4.20	0.20	12.60	
47.3	58.8		Cum	1	11.50	4.65	0.20	10.70	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	5.15	0.20	15.45	
15	30		Cum	1	15.00	5.15	0.20	15.45	
30	45		Cum	1	15.00	5.50	0.20	16.50	
45	60		Cum	1	15.00	5.65	0.20	16.95	
60	75		Cum	1	15.00	5.05	0.20	15.15	
75	86.1		Cum	1	11.10	4.70	0.20	10.43	
87.6	95.2		Cum	1	7.60	4.90	0.20	7.45	
							Total	144.94	
							Quantity Limited to	122.00	

Contactor

CIVIL Pro Sig Date RMC BANGALORE

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no. 13		Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. and as per the directions of Engineer in-charge.							
		3rd A cross							
0	2.3		Cum	1	2.30	3.50	0.15	1.21	
2.3	17.3		Cum	1	15.00	3.65	0.15	8.21	
17.3	32.3		Cum	1	15.00	3.90	0.15	8.78	
32.3	47.3		Cum	1	15.00	4.20	0.15	9.45	
47.3	58.8		Cum	1	11.50	4.65	0.15	8.02	
		5th A Cross							
		From main road							
0	15		Cum	1	15.00	5.15	0.15	11.59	
15	30		Cum	1	15.00	5.15	0.15	11.59	
30	45		Cum	1	15.00	5.50	0.15	12.38	
45	60		Cum	1	15.00	5.65	0.15	12.71	
60	75		Cum	1	15.00	5.05	0.15	11.36	
75	86.1		Cum	1	11.10	4.70	0.15	7.83	
87.6	95.2		Cum	1	7.60	4.90	0.15	5.59	
							Total	108.70	
							Quantity Limited To	91.50	

CIVIL Pro Sig. Date BMC BANGALORE

Contactor

Assistant Engineer

A.E.E

Assistant Executive Engineer

MEASUREMENT SHEET - 1st and FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
Item no.14		Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift. and as per the directions of Engineer in-charge.							
		3rd A cross							
0	2.3		Sqm	1	2.50	3.50		8.05	
2.3	17.3		Sqm	1	15.00	3.65		54.75	
17.3	32.3		Sqm	1	15.00	3.90		58.50	
32.3	47.3		Sqm	1	15.00	4.20		63.00	
47.3	58.8		Sqm	1	11.50	4.65		53.48	
		5th A Cross							
		From main road							
0	15		Sqm	1	15.00	5.15		77.25	
15	30		Sqm	1	15.00	5.15		77.25	
30	45		Sqm	1	15.00	5.50		82.50	
45	60		Sqm	1	15.00	5.65		84.75	
60	75		Sqm	1	15.00	5.05		75.75	
75	86.1		Sqm	1	11.10	4.70		52.17	
87.6	95.2		Sqm	1	7.60	4.90		37.24	
							TOTAL	724.69	
							Quantity Limited To	610.00	

CIVIL Pro Sig Date PMC BANGALORE

Contactor

Assistant Engineer

Assistant Executive Engineer